

Appl. No. # 10/781,221
Amdt. dated 5/24/2005
Reply to OA of 5/11/2005

Amendment to the Specification:

Please amend the brief description of the drawings as follows.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic illustration of an anode/cathode substrate plate of the present invention.

Figure 2 is a schematic circuit illustration of the present invention.

Figure 3 is a cross-section of the battery showing the gaps.

Page 3, line 29 please replace the paragraph 1. at the bottom of the page with the new paragraph 1.

1. A Carbon-based Nanotube (CNT) battery comprises of a battery cell trough, electrolyte, a spring coil, an anode/cathode substrate plate and its separation membrane 40, and external positive and negative terminals. The anode substrate plate is composed of an aluminum plate and an active Carbon Nanofiber layer. Negative terminal plate is composed of a copper plate and an active Carbon Nanofiber layer. The individual tube diameter of the Carbon Nanofiber layer is 20nm, with the length of 290nm. There exists a gap in between each set of the substrate plate and its separation membrane 40, forming the capacity-like functionality having an equivalent effect as a parallel connection of a battery and a capacitor. The separation membrane is made by high-molecule, high-insulation cloth, with the size of the battery inner trough. Said Carbon-based Nanotube (CNT) battery is able to allow high current recharging/discharging process, with 1/17 charging time than before. The power ratio is 8 times higher than lead-based batteries. The weight of the battery is dramatically reduced.